



Empowering ERP Asset Management Solutions

Oracle Maintenance Cloud: Missing Pieces

Have you considered ALL there is to moving to Oracle Maintenance Cloud?

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"The transition to cloud is a generational change. This is a big deal, as big a deal as when PCs showed up in the days of minicomputers and mainframes." - *Larry Ellison, co-founder, executive chairman, and chief technology officer of Oracle Corporation, speaking at Oracle OpenWorld in 2015.*

Ellison was not speaking about the concerns of maintenance organizations when he said this, but he may as well have been. Transitioning the maintenance department from an on-prem installation to the cloud can be a huge undertaking, but one that holds significant benefits both for maintenance and the company as a whole.

Moving to the cloud is not simply a matter of taking your current on-prem software and stashing it in a server centre somewhere offsite. The greatest benefits of implementing Oracle Maintenance Cloud will only be realized if the implementation has been conducted successfully. Any large-scale software implementation has challenges. This remains true regardless of whether the software is installed on-premise or in the cloud.

Among the most obvious considerations is that the new software will likely impact your processes. Transitioning to the cloud includes this, but it also offers its own set of unique challenges that an on-premise installation does not. Please see "Cloud for Maintenance: 5 Areas to Consider Before Getting Started" for an in-depth discussion of these issues.

In this paper we are focused not on cloud implementations in general, but on the specific considerations, challenges, and opportunities that come with transitioning to Oracle Maintenance Cloud, in particular the impact it will have on your department and your processes. Determining exactly how Oracle Maintenance Cloud will change your workflow will leave you in a better position to proactively deal with those changes.

Cloud Computing Today

It may seem as if every business is either preparing to move to the cloud or has already done so. While on-prem is still a major force, there's no denying that many organizations are moving to public, private, or hybrid clouds.

Oracle Maintenance Cloud can be run on any type. It should also be noted that Oracle Corporation offers its Oracle Cloud Platform (OCP) as part of the overall Oracle Cloud. OCP is a Platform as a Service (PaaS) offering used to build, deploy, integrate and extend applications in the cloud.

Each type of cloud (public, private, or hybrid) offers certain advantages. The type of cloud that is "best" depends significantly on your organization, your IT department, your resources, and a host of other factors.

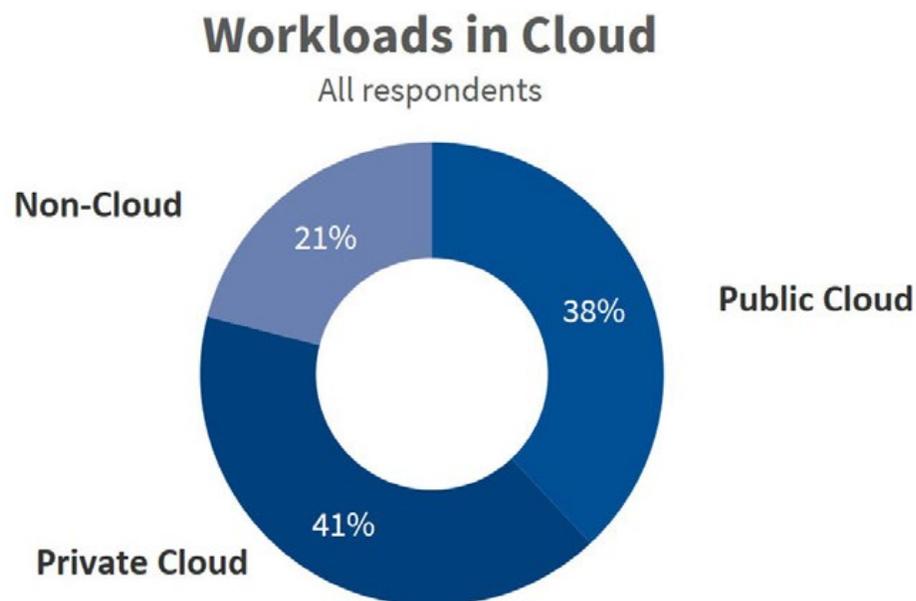
| Types of Clouds | | |
|--|---|--|
| Public | Private | Hybrid |
| <p>This cloud uses physical hardware shared by many clients and owned and operated by a third party. Examples include Amazon Web Services, Google Cloud, and Microsoft Azure.</p> | <p>A private cloud uses infrastructure dedicated solely to your business. The hardware itself can be hosted on-site or at a service provider's data center.</p> | <p>Hybrid clouds use a combination of public and private services, usually allowing workloads to move between them as needed.</p> |
| <p>Improved Security: Big cloud vendors put a lot of money into security and usually subject their clouds to regular penetration testing.</p> <p>Faster Install: There's no lengthy procurement process for hardware, and no waiting for IT to install the system or configure servers.</p> <p>No Capital Investment: You don't need to buy, store, or maintain equipment. You typically pay a subscription fee and then just pay for what you use. Note that this does not necessarily mean a lower cost overall. The annual spend on cloud is impacted by many different factors.</p> | <p>Total Cost of Ownership: This can vary from business to business, but over several years <u>private clouds typically carry less cost than public clouds.</u></p> <p>Customization and Control: They're built to suit your requirements, including in terms of scaling and architecture, ensuring they're suitable.</p> <p>Performance and Scalability: All the resources in your private cloud are theoretically at your disposal. Scaling is either a matter of configuring and deploying new cloud servers (virtual layer) or adding new physical servers (physical layer).</p> | <p>Agility: Hybrid clouds can adapt quickly when needed, as they are built from a combination of private and public clouds, and on-prem resources.</p> <p>Speed: Hybrids are not inherently faster, but you can use the private part to lower latency and use edge computing to locate services closer to users.</p> <p>Resiliency: Data is still accessible with little or no downtime in the event of a catastrophe, as critical data can be replicated both on your private cloud and in the public cloud portion. This makes it more likely that at least one copy of the data can be accessed.</p> |

According to [a survey conducted by LogicMonitor](#) in 2017, 83% of enterprise workloads would be in the cloud by 2020. This includes 41% run on public cloud platforms, 20% on private clouds, and the last 23% running on hybrids.

The same survey predicted a shrinking of on-premise workloads to just 27% by 2020 - a drop of 10% over just three years.

At the time we prepared this report, two years had passed since that survey was conducted and 2020 was almost upon us. Has the wide scale movement predicted by LogicMonitor come to pass?

According to the [RightScale 2019 State of the Cloud Report](#) from Flexera, that promise is very close to being fulfilled. Respondents to that survey run a combined total of 79% of workloads in the cloud (38% public and 41% private). This is a bit short of the 83% predicted by the 2017 LogicMonitor survey, but it's important to note that the RightScale report was conducted in January 2019, nearly a full year before the 2020 target date dealt with in the report from LogicMonitor. It would seem as if cloud adoption in the real world is very much in line with those predictions.



Source: RightScale 2019 State of the Cloud Report from Flexera

Figure 1: This graph shows the total percentage of cloud workloads in January 2019. The graph and data are property of Flexera, and are used here by permission under the [Creative Commons Attribution 4.0 International Public License](#).



Why the Shift?

The data is clear: more and more organizations are transitioning at the cloud due to the benefits that cloud can bring to their business. Looking specifically at maintenance and asset management, there is always a desire to operate assets with greater efficiency, uptime, and effectiveness.

Operations that have been asked to do more with less continue to seek technology opportunities that deliver cost savings but don't have a negative impact on performance or output, making cloud a logical consideration for the business. These include:

Deployment Time: Cloud installations can often be deployed more quickly than on-prem, thanks to minimization of IT requirements.

Flexibility: Cloud optimizes computing resources by allocating more capacity as it's needed. Scaling up is built into the system. Just as important although often ignored, scaling down is a trivial concern, again because of the inherent nature of cloud services.

Cash Flow: Cloud computing eases up on cash flow as it's typically a subscription-based model. You rent as you go rather than ponying up the dough to buy expensive hardware.

Data Capacity: Modern maintenance processes generate tremendous swathes of data, to say nothing of data generated by the assets themselves. Cloud's effectively limitless storage space is a boon to any organization that finds itself running out of digital room for its historical and current data.

Accessibility: This may be the greatest benefit for maintenance. You can access the information you need from anywhere when it's hosted in the cloud.

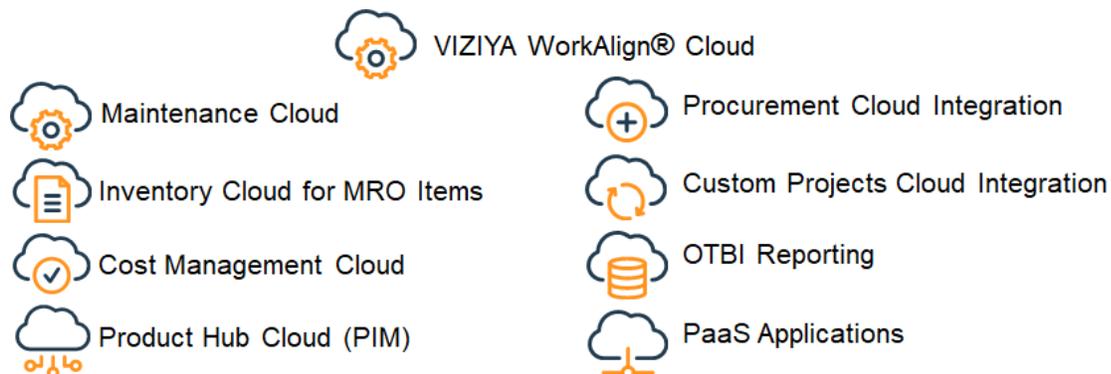
There's also the matter of growth. [Dell's Global Technology Adoption Index](#) revealed in 2015 that, "...organizations actively investing in big data, cloud and mobility have up to 53 percent higher growth rates compared to those who aren't using the technologies. That's a strong correlation, not just noise."

For an in-depth look at some of these factors that relate specifically to Maintenance, please see "[What's the Deal with Maintenance in the Cloud?](#)"

Oracle Maintenance Cloud Deployment

In this section, we'll take a look at the modules that make up Oracle Maintenance Cloud and what must be done at each stage to ensure an orderly transition and smooth deployment. In addition, we'll discuss some items that are not part of the Oracle Maintenance Cloud, but can have an impact on the success of your transition.

- 1. Inventory Cloud:** First, the Inventory and Cost Organization must be designed to support maintenance operations and MRO inventory replenishment strategies. This includes pre-defined Locators and a Consumable Inventory solution.
- 2. Product Management Cloud:** This is where the foundations for Maintenance, Inventory and Procurement Analytics are established and must be defined following maintenance best practices.
- 3. Maintenance Cloud:** This provides the framework for Work Identification, Work Definition, Work Execution, and Maintenance Analytics.
- 4. Cost Management Cloud:** This enables the configuration of flexible, yet concise maintenance and inventory costing rules.
- 5. Procurement Cloud Integration:** This manages critical sourcing and forecasting for both the Maintenance Cloud and Inventory Cloud business processes, which are foundational elements of a successful Maintenance Cloud solution.
- 6. Projects Cloud Integration:** Utilizing Work Order Costs with attributes defined in the Product Management Cloud, this provides reporting for personnel to enter or upload to the project's cloud.
- 7. OTBI (Oracle Transactional Business Intelligence) Reporting:** Your business requirements may require both out-of-the-box and custom reports. This is the stage at which these reports are developed, utilizing data from all component modules within the Maintenance Cloud solution universe.
- 8. PaaS Applications:** These include various Platform as a Service (PaaS) options, among them Oracle Cloud Platform.
- 9. VIZIYA WorkAlign Cloud:** Not part of any product from Oracle, but included on this list as it offers bolt-on seamless integration with Oracle Cloud and can greatly enhance maintenance processes.



Benefits of Oracle Maintenance Cloud

Realizing the greatest benefits from cloud for maintenance relies on the implementation being conducted successfully. One of the most important factors to remember is that moving to the cloud is not just a decision about technology. Cloud migration is far more involved than simply taking your current on-premise software and reproducing it on a hosted server.

The impacts go beyond those involved in most technology purchase decisions. Cloud for maintenance implementation must be viewed first and foremost as a business decision. This is because the cloud has the potential to change the entire way you conduct maintenance, from planning decisions all the way through to turning the bolts.

Realizing the greatest benefits from cloud for maintenance relies on the implementation being conducted in the right way, with a comprehensive review of business, systems and processes. This includes a review of what you do today, and what you'd like to, or need to do and addressing any gaps that exist. This is because moving to the cloud is not just a decision about technology but an opportunity to transform your maintenance operation and broader business so that systems, processes and people are aligned with corporate objectives, and best practice.

Factors like real-time updates and relative ease of scalability are examples of some of the obvious advantages that can help planners, schedulers, and technicians to be more flexible in their approaches to maintenance and reliability, and most efficient and effective in their role, including:

1. You've performed your last on-prem upgrade, ever! You may have only rarely been involved in an on-prem upgrade, and for good reason. Organizations frequently go years in-between on-premise upgrades due to their high costs in terms of both money and resources. There's also the chance that the upgrade will effectively erase a lot of customizations that you've put in place. You may spend time and money putting in the upgrade, then even more time and more getting the solution to offer the same functionality that you had painstakingly built before.

This doesn't happen with Oracle Maintenance Cloud. Updates are released every quarter and always increase the functionality of the solution. Typically, Oracle builds these after consultation with their users and implementation partners. In fact, the influence that an implementation partner can wield on your behalf over the Oracle Development Roadmaps is a strong reason for making sure you use the right one.

2. You can realize greater efficiency with Oracle Maintenance Cloud, in part because it's designed to be mobile-friendly. It presents a consistent interface across devices, and it's been designed for ease of use to aid in adoption. In addition, there are fewer steps for each user interaction.
3. Work Definitions in Oracle Maintenance Cloud are essentially pre-planned jobs. You can set them up once, and then the system automates the entire work order creation and planning process for those jobs. For work orders that don't fall under Work Definitions, the system itself takes you through the entire planning, creating, and execution process.
4. Oracle Maintenance Cloud provides greater visibility and increased insight into how assets are functioning and how the maintenance department itself is performing. This data

drives improvements across the maintenance workflow, extending asset life, optimizing processes, and even reducing energy use.

5. By its very nature, Oracle Maintenance Cloud gives you the capability to move to the next level in the maintenance hierarchy, from reactive maintenance all the way to a prescriptive approach. The system gathers data constantly and, over time, will be able to predict and identify the root causes of asset failure.

Benefits of VIZIYA Global

It's much easier to make a successful transition to Oracle Maintenance Cloud when you have a solid implementation partner. VIZIYA Global, the consulting arm of VIZIYA Corporation, consists of maintenance cloud solution specialists, eAM solution specialists, and maintenance best practices experts.

With a focus on maintenance best practices, we utilize the Oracle Cloud tools to craft a solid Maintenance Business Process for our customers. We have our own fully vetted Oracle Maintenance Cloud POD where our consultants are actively learning and testing all new functionality released.

Because we are an Oracle Partner and have numerous Oracle Maintenance Cloud customers, we have influence over Oracle's Development Roadmap. Common Functionality Requirements across customers are represented as a group to make roadmap changes more appealing to Oracle development.

The first step in implementing Oracle Maintenance Cloud is assessing exactly where your organization is now. VIZIYA Global's Oracle Maintenance Cloud Assessment uses the following steps and shows which departments are involved:

- STEP 1:** Executive Project Kickoff (Stakeholders, Maintenance, IT)
- STEP 2:** Structure and Business Processes (Maintenance, IT)
- STEP 3:** MRO Inventory (Inventory, Maintenance, IT)
- STEP 4:** Asset Tracking (Maintenance, IT)
- STEP 5:** Purchasing (Procurement, Maintenance, Inventory, IT)
- STEP 6:** Finance (Finance, Executives, Stakeholders, Maintenance)
- STEP 7:** Preventive Maintenance (Maintenance, IT)
- STEP 8:** IoT AM (Asset Monitoring) Cloud
- STEP 9:** Confirm Findings and Business Goals (Team Review – all key reps)
- STEP 10:** Deliverables (Follow-up Meetings with Customer, Oracle and ViziyA)

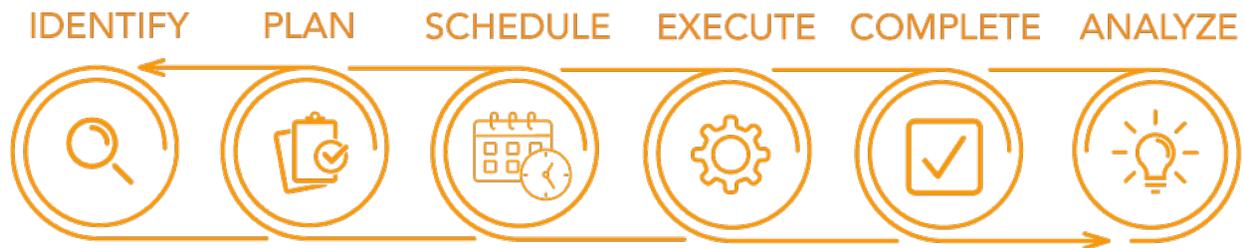
A Maintenance Cloud Solution Specialist will come on-site and conduct a series of workshops to identify critical maintenance-related business process requirements.

The Specialist will then map these processes to the Maintenance Cloud Functionality, the Oracle Roadmap, and the VIZIYA Roadmap to resolve any gaps.

Deliverables are the Project Scope and Project Plan, aligned with your desired Implementation Timeline to create a Best Practice Solution.

We stay engaged, visiting periodically, to track the progress of any internal efforts and the Oracle & VIZIYA Roadmaps.

We would be remiss if we didn't take this opportunity to mention VIZIYA WorkAlign Cloud, our bolt-on solution for Oracle Maintenance Cloud that serves as a platform for all your maintenance needs. The solution enhances every stage of the maintenance process.



Identify: The solution automatically notifies you when elements reach critical levels that require inspection or maintenance.

Plan: A built-in work order quality check module that helps ensure all requirements of your organization's work orders are met before entering the scheduling funnel.

Schedule: Easily schedule all work orders and access easy-to-use drag 'n' drop functionality with a graphical interface to track KPIs and work progress.

Execute: Execute work wherever you are in the field or in the plant, and captures all information in real-time so there are no errors or time lags.

Complete: All work being performed, either connected or disconnected, is captured and updated in real-time so it can be accessed by everyone in the organization.

Analyze: Finally, the solution comes with hundreds of pre-built maintenance reports to help measure KPIs and overall maintenance performance. All reports can be tailored to fit your needs.

For more information on Oracle Maintenance Cloud and how VIZIYA can help you reach your goals, please [contact us here](#).



About VIZIYA

Headquartered in Hamilton, ON, with offices in Barcelona, Perth, Atlanta and Dubai, VIZIYA is the industry leader providing bolt-on software products to enhance ERP- based asset maintenance systems. VIZIYA's proprietary WorkAlign™ Product Suite delivers seamless integration into existing ERP systems. With over 51,000 users at 850 sites across 6 continents, the world's best companies use VIZIYA products to help them better maintain their assets. Visit viziya.com for more information.